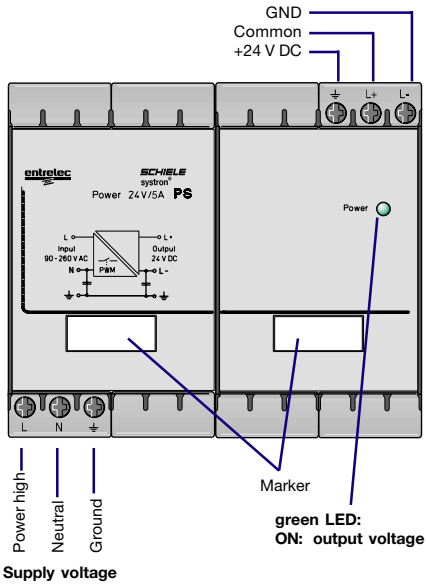
Switching Power Supply systron® PS

The switching power supplies, systron® PS, offer many advantages over conventional supplies:

- DIN Rail mount compact modules
- Low weight
- High efficiency
- Low heating
- Wide range of supply voltage
- Constant output voltage with good regulation
- UL, CSA listed, EN 50178 (VDE 0160)
- Short-circuit and overload proof
- Fused input
- Adjustable output voltage
- Power factor correction

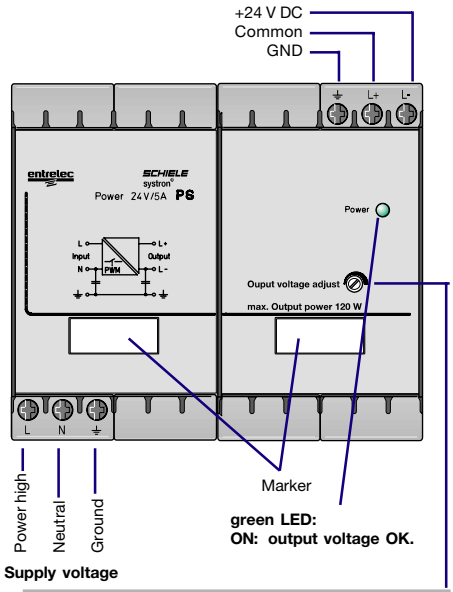
24 V DC / 5 A



Approvals: UL, CSA

Power supplies systron® PS	P/N:
systron® PS 24 V DC / 5 A	2 423 416 00

24 V DC / 5 A



Note: Adjustable output voltage from 23 to 28 V DC

Approvals: cULus LISTED

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Technical data

Input						
Supply voltage	90...260 V AC			90...260 V AC		
	127...260 V DC			127...260 V DC		
Frequency, AC input	47... 63 Hz			47... 63 Hz		
Output load hold time	With input voltage drop out, min. 10 ms at 100% load (90 V AC)			With input voltage drop out, min. 10 ms at 100% load (90 V AC)		
Input current at nominal load	max. 1.8 A (90 V AC)/typ. 1.3 A (115 V AC)/0.63 A (230 V AC)			max. 1.8 A (90 V AC)/typ. 1.3 A (115 V AC)/0.63 A (230 V AC)		
Inrush current 25° C (≤ 2 ms)	40 A (260 V)			40 A (260 V)		
Internal input fuse	2 A (slow blow)			2 A (slow blow)		
Output						
Output voltage	24 V DC ± 3 %			24 V DC ± 3 % (23...28 V DC adjustable with poti (max. 120 W))		
Output current / power at...	T ≤ 40°C	T > 40°C	T = 55°C	T ≤ 40°C	T > 40°C	T = 55°C
V_{in} = 90...260 V AC	5 A	-0.054 A/°C	4.2 A	5 A (24 V)/120 W	-1.33 W/°C	4.2 A (24 V)/100 W
V_{in} = 127...260 V DC	5 A	-0.054 A/°C	4.2 A	5 A (24 V)/120 W	-1.33 W/°C	4.2 A (24 V)/100 W
Residual ripple / noise	max. 200 mVpp			max. 200 mVpp		
Deviation of output with input change	max. ± 0.05 %			max. ± 0.05 %		
Deviation of output with static load change	max. ± 0.5 %			max. ± 0.5 %		
Deviation of output with dynamic load change	max. 5 %			max. 5 %		
Short circuit protection	overcurrent switch off with automatic restart			overcurrent switch off with automatic restart		
Overload protection	overtemperature and overcurrent switch off			overtemperature and overcurrent switch off		
Reset after thermal overload	disconnection of AC power input min. 30 s			disconnection of AC power input min. 30 s		
Norms, tests						
Electrical safety standards, approvals	EN 50178 (VDE 0160)/EN 60950/UL 508/CSA 22.2			EN 50178 (VDE 0160)/UL 508/CSA 22.2		
Galvanic isolation	reliable isolation acc. to EN 60950, DIN VDE 0106-101			reliable isolation acc. to IEC 664-1, DIN VDE 0106-101		
Voltage withstand input <-> output	1.5 kV AC, 3 kV AC type test			1.5 kV AC, 3 kV AC type test		
Clearance and creepage distances according to	overvoltage category 3, pollution degree 2			overvoltage category 3, pollution degree 2		
Electromagnetic immunity (EMI) in acc. to EN 50082-2:	ESD:	EN 61000-4-2 level 3	6/8 kV	ESD:	EN 61000-4-2 level 3	6/8 kV
	RF field:	EN 61000-4-3 level 3	10 V/m	RF field:	EN 61000-4-3 level 3	10 V/
	Burst:	EN 61000-4-4 level 3	2 kV	Burst:	EN 61000-4-4 level 3	2 kV
	Surge:	EN 61000-4-5	2 kV	Surge:	EN 61000-4-5	2 kV
	conducted RF:	EN 61000-4-6 level 3	10 V	conducted RF:	EN 61000-4-6 level 3	10 V
Electromagnetic compatibility (EMC) in acc. EN 50081-2	radiated noise EN 55011, class A			radiated noise EN 55011, class A		
Input current harmonics	limited according to EN 61000-3-2, class A			limited according to EN 61000-3-2, class A		
Protection against contact						
Terminals	IP 20			IP 20		
Housing	IP 20			IP 20		
Protection class	1			1		
General characteristics						
Efficiency (nominal load)	77...85 % (90...260 V AC)			77...85 % (90...260 V AC)		
Status indication	green LED, power OK			green LED, power OK		
Operating temperature	0° ... 55°C			0° ... 55°C		
Storage temperature	-25° ... +75°C			-25° ... +75°C		
Terminals	screw terminals, 2 x 14 AWG (2.5 mm²)			screw terminals, 2 x 14 AWG (2.5 mm²)		
Weight	approx. 0.58 kg (1.3 lb)			approx. 0.58 kg (1.3 lb)		
Dimensions (W x H x D)	90 mm x 78 mm x 120 mm			90 mm x 78 mm x 120 mm		
Mounting hints	Normal position: horizontal onto DIN rail, Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm			Normal position: horizontal onto DIN rail, Spacing to other modules: left side min. 1 cm, vertical distances min. 5 cm		